



Infrared (IR) Illuminating Mortar Cartridges

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AMC

PM-Mortars



US Army Infantry Center



TRADOC

Partnering to provide
the Infantry's Night
Warrior the latest
IR mortar technology



ARDEC

Pine Bluff Arsenal



Crane Army Ammunition Activity



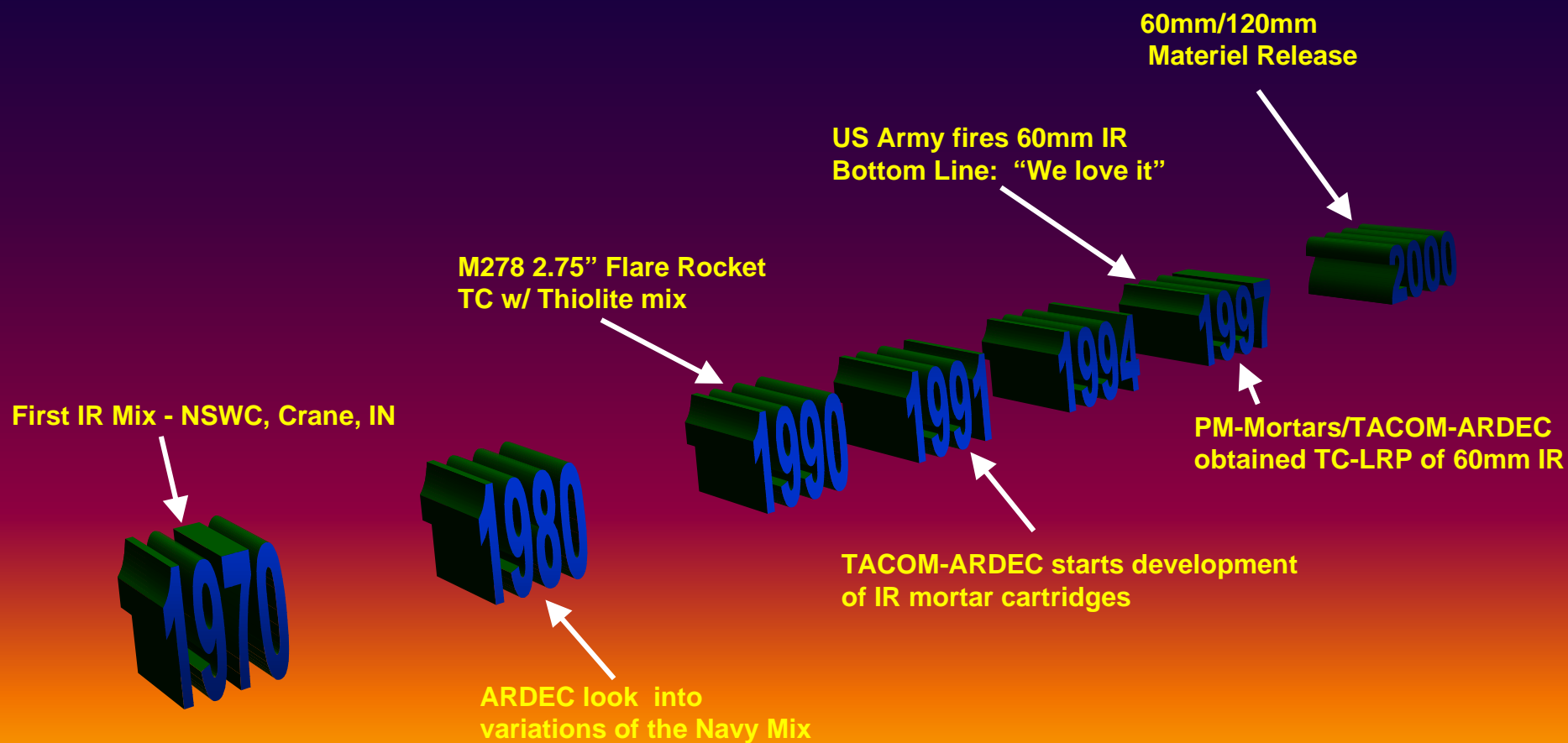


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IR Technology: History/Background



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60mm IR Illum Mortar Cartridge



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TACOM

Enhancing the Light Infantry's night vision capabilities

Current Customer

- US Army

M224 Lightweight Company Mortar



- Maximum Range - 3,500 m
- Rate of Fire - *Maximum* - 30 rounds for four min
Sustained - 20 rounds/min
- Illumination output - 60 watts/steradian for 40 secs



USER PAYOFF

- Illuminates throughout the range band of HE
- Enhances NVD Capabilities
- Reduced Shadows/Sharper Images
- Provides Minimal Visible Light
- Supports "Own the Night" missions



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81mm IR Illum Mortar Cartridge



M252 Improved Mortar

- ➡ Maximum Range - 5,700 m
- ➡ Rate of Fire - *Maximum* - 30 rounds/min for two min
Sustained - 15 rounds/min
- ➡ Illumination output - 75 watts/steradian for 60 secs



XM816

Current Customer

- US Army

USER PAYOFF

- Enhances NVD Capabilities
- Reduced Shadows/Sharper Images
- Provides Minimal Visible Light
- Supports "Own the Night" missions





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120mm IR Illum Mortar Cartridge

M121 Carrier Mortar



M120 Towed Mortar



- ➔ Maximum Range - 7,200 m
- ➔ Rate of Fire - *Maximum* - 16 rounds first minute
Sustained - 4 rounds/minute
- ➔ Illumination output - 100 watts/steradian for 50 secs



XM983

Current Customer

- US Army

USER PAYOFF

- Enhances NVD Capabilities
- Reduced Shadows/Sharper Images
- Provides Minimal Visible Light
- Supports "Own the Night" missions



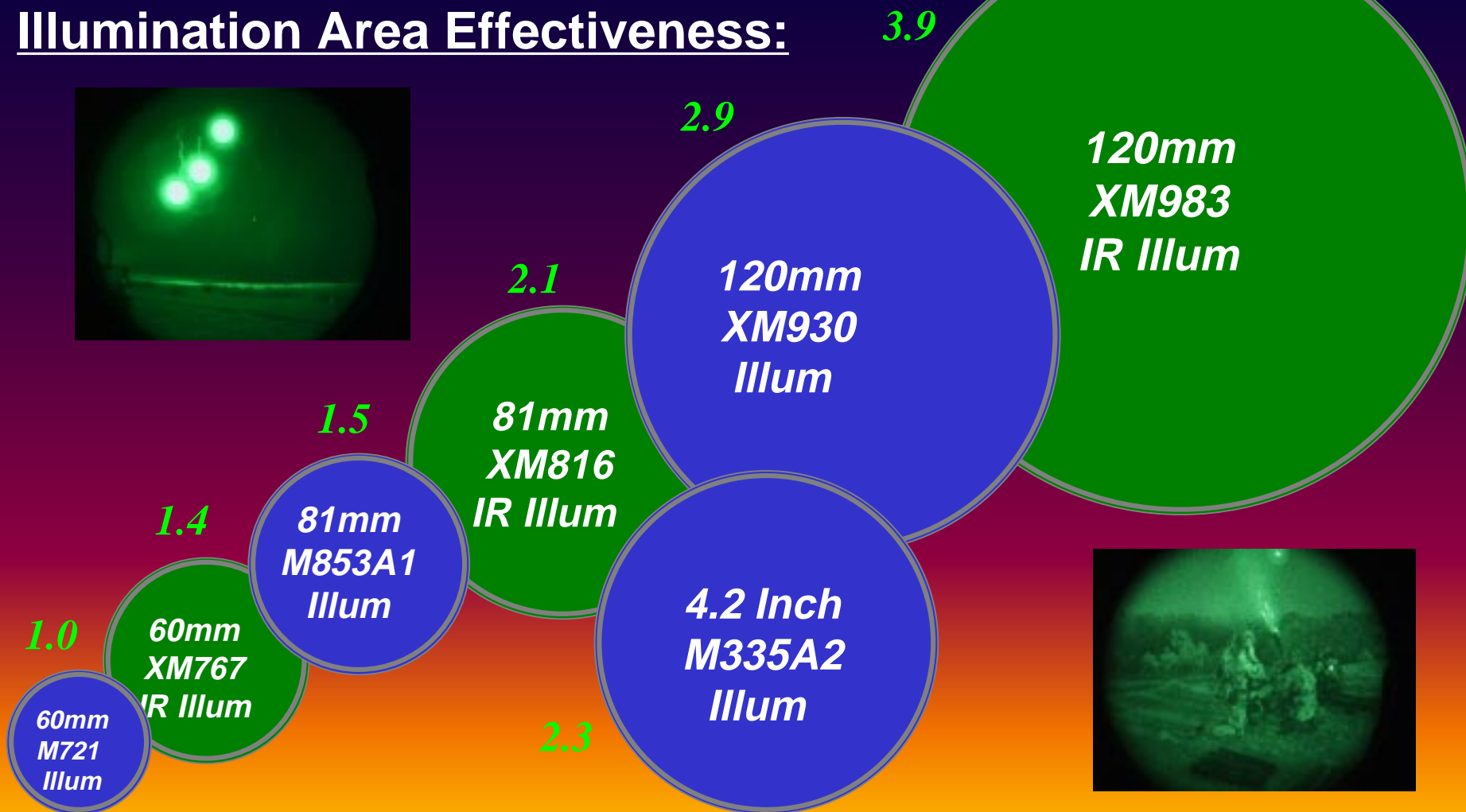
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Relative Mortar Illumination



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Illumination Area Effectiveness:





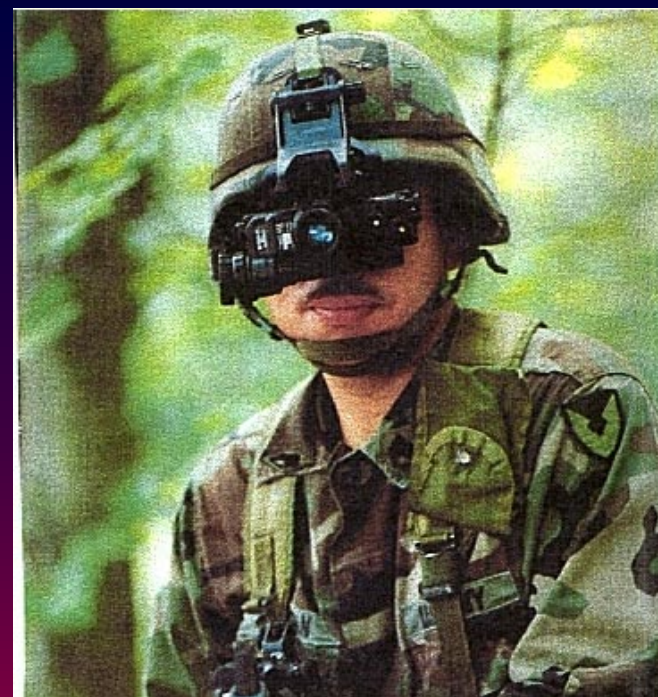
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Night Vision - Mission Support



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From the ground warrior...



**... to the air fighter.
We support them all!!!**